REMARKS/ARGUMENTS

Claims 1-20 are pending. By this Amendment, claim 16 is amended. No new matter has been added.

Entry of the amended claim is proper under 37 C.F.R. §1.116 since the amendments: (1) place the application in condition for allowance (for the reasons discussed herein); (2) do not raise any new issues requiring further search and/or consideration (since the amendments amplify issues previously discussed throughout prosecution without incorporating additional subject matter); (3) satisfy a requirement of form asserted in the previous Office Action; and/or (4) place the application in better form for appeal (if necessary). Claim 16 is merely amended to provide sufficient antecedent basis for a term. Entry is thus requested.

For the following reasons, reconsideration is respectfully requested.

I. THE PERSONAL INTERVIEW

Applicants thank Examiner Brocketti for the courtesies extended to Applicants' representative during the November 22, 2004 Personal Interview. The points discussed are incorporated into the Remarks below and constitute the Applicants' record of the Interview.

During the Personal Interview, the Applicants' representative noted that the object of the present invention is to transmit audio and video information relating to a broadcast channel along with game program and game program information to a receiver so that a user may use the

receiver to either choose to view a broadcast program or select a game program based on game related information to play the game. In doing so, a transport stream containing both a broadcast signal and a game program is sent. In one example, a broadcast signal in the conventional sense containing information regarding broadcast programming is brought together with a game program and/or game information and sent to a receiver so that a user is able to select either the image and audio information corresponding to the broadcast signal, e.g., the broadcast signal channel containing broadcast programming, or a game program ordered by the user (see page 6, lines 5-9 of Applicants' specification).

Throughout the Applicants' specification, it is clearly disclosed that the image and audio information relate to a channel, e.g., a broadcast signal channel, which are distinct and separate from a game program and the game related information (see page 8, lines 11 through page 9, line 5, page 9, line 6 through page 10, line 1, page 10, line 15 through page 11, line 8, page 11, line 18 through page 12, line 15 of Applicants' specification).

Again and again, the Applicants' specification clearly shows the structures and functions of combining image and audio information of the broadcast signal of a channel with a game program and game related information into a data stream called a transport stream. Applicants' specification clearly shows the ability to parse the received transport stream based on user's selection into image and audio information for the broadcast channel from a game program and game related information for playing a user selected game. Therefore, based on the disclosure in

the specification, one of ordinary skill in the art would not reasonably conclude that the image information and the audio information relates to a game program or a game related information. Instead, one of ordinary skill in the art would realize the image and audio information are of the broadcast signal.

Applicants respectfully submit that a reasonable reading of the claims in view of the above noted disclosures in the Applicants' specification clarifies the identity of the image information and the audio information recited in the claims as not of the game program.

II. REPLY TO REJECTIONS

A. 35 U.S.C. §112, Second Paragraph

On page 2 of the Office Action, claims 16-19 are rejected under 35 U.S.C. §112, second paragraph as indefinite for lacking sufficient antecedent basis for a claim term. Claim 16 is amended to obviate the rejection. Withdrawal of the rejection is respectfully requested.

B. 35 U.S.C. §102 Rejections

On page 3 of the Office Action, claim 16 is rejected under 35 U.S.C. §102(b) over U.S. Patent No. 5,489,103 to Okamoto. The rejection is respectfully traversed.

Claim 16 calls for extracting a game list comprising game related information from a transport stream that includes image and audio information, a listing of game programs, and game-related information.

Okamoto discloses sending a retrieved game data via the headend 130 to the transmission paths 200, and the game data being received at the personal communicator 1, and being stored in the memory 8 (column 6, lines 27-34; Figures 2 and 6). In Okamoto, no game list is extracted from a transport stream that includes image and audio information, a listing of game programs, and game related information. Rather, three separate types of data are separately transmitted upon request.

Okamoto shows three separate databases, namely, a game database 101, a karaoke database 103, and an other database 105, each respectively connected to a game data transmitter 111, a karaoke data transmitter 113, and an other data transmitter 115 (column 4, lines 39-46, Figure 2). Each of the databases 101, 103, and 105 are accessed separately corresponding to a specific request for game data, karaoke data, or other data (column 4, lines 47-53). When game data is requested, only the game data, (i.e., software of a video game) is sent to the transmission paths 200 (column 6, lines 23-31). Okamoto fails to disclose transmitting the game data with any other image and audio information or a listing that comprises a transport stream. Rather, there is mere transmission and downloading of game data. Thus, Okamoto fails to disclose extracting a game list, and fails to disclose a transport stream as called for in claim 16.

Consequently, claim 16 is patentable over Okamoto. Withdrawal of the rejection is respectfully requested.

On page 3 of the Office Action, claims 2-4 and 14 are rejected under 35 U.S.C. §102(e) over U.S. Patent No. 5,944,608 to Reed et al. (hereinafter "Reed"). The rejection is respectfully traversed.

Claim 2 calls for a multiplexer configured to convert image and audio information, a game program, and game related information into a transport stream. Claim 14 calls for converting image and audio information, a game program, and game related information into a transport stream.

Reed, in contrast, discloses a tone multiplexer 304 which multiplexes data and allows up to 100 or more tone channels to be transmitted (column 16, lines 64-67). A throughput of approximately one megabit per second is achieved by using the multiplexer 304. The multiplexer 304 output is used by a modulator 306 to frequency modulate an amplifier 308 which receives input from an oscillator 310 (column 17, lines 1-5). Reed specifically discloses using the tone channels to transmit the data. Reed discloses that sending the game data may include using eight tone channels in groups to provide a parallel data path for a single game to be loaded into memory locations having eight bits per location, or using 15 modulated tone channels, each of which maybe used to provide computer data for one video game (column 17, lines 26-31). In other words, Reed's multiplexer 304 is able to multiplex (or split up) one game into different tone channels, or multiplex one game per one tone channel. However, Reed fails to disclose that the multiplexer 304 is able to multiplex items other than a computer data for a

single game, and to convert image and audio information, a game program, and game related information into a transport stream. In fact, Reed discloses a demultiplexer 320 used to recombine the data into original format (column 17, lines 21-22).

Thus, Reed fails to anticipate the above-discussed features called for in claims 2 and 14. Accordingly, claims 2 and 14 are patentable over Reed. Claims 3 and 4, which depend from claim 2, are likewise patentable over the applied reference for at least the reasons discussed above and for the additional features they recite. Withdrawal of the rejection is respectfully requested.

C. 35 U.S.C. §103 Rejections

On page 4 of the Office Action, claim 15 is rejected under 35 U.S.C. §103(a) over Reed. The rejection is respectfully traversed.

As discussed above for claim 14, Reed fails to suggest all of the features of claim 14. Therefore, claim 15, which depends from claim 14, is likewise patentable over Reed for at least the reasons discussed above and for the additional features it recites. Withdrawal of the rejection is respectfully requested.

On page 5 of the Office Action, claims 17 and 19 are rejected under 35 U.S.C. §103(a) over Okamoto. The rejection is respectfully traversed.

As discussed above for claim 16, Okamoto fails to suggest all of the features of claim 16. Therefore, claims 17 and 19, which depend from claim 16, are likewise patentable over Okamoto for at least the reasons discussed above and for the additional features they recite. Withdrawal of the rejection is respectfully requested.

On page 6 of the Office Action, claim 18 is rejected under 35 U.S.C. §103(a) over Okamoto, in view of U.S. Patent No. 6,005,561 to Hawkins et al. (hereinafter "Hawkins"). The rejection is respectfully traversed.

Hawkins fails to overcome the deficiencies in Okamoto discussed above for claim 16. Therefore, claim 18, which depends from claim 16, is patentable over the combination of Okamoto in view of Hawkins for at least the reasons discussed above and for the additional features it recites. Withdrawal of the rejection is respectfully requested.

On page 6 of the Office Action, claim 20 is rejected under 35 U.S.C. §103(a) over the reference to Lazzuri, in view of Hawkins. The rejection is respectfully traversed.

Claim 20 calls for a downloader configured to receive a broadcast signal, and to download a game program ordered by a user using game-related information encoded in the broadcast signal.

Lazzuri, in view of Hawkins, fails to suggest the features called for in claim 20 because there is no suggestion or motivation either in the references themselves or in the knowledge

generally available to one of ordinary skill in the art to modify the references or to combine reference teachings, and there is no reasonable expectation of success.

Lazzuri discloses that the SEGA channel signal originates in Denver, Colorado and is carried over the Galaxy-7 satellite. The uplink signal is carried at a carrier frequency of 1.435 GHz while the downlink signal is at a frequency of 1.1 GHz (Lazzuri's drawing figure). The downlink signal is then provided to a subscriber loop (Lazzuri's drawing figure).

Compared to this method of signal delivery, Hawkins discloses that its cable system uses a bi-directional trunk system 22 (Figure 2) where two signals, analog and digital, are used (column 9, lines 61-67, Figures 3A-3C). Both the analog uni-directional and the digital bi-directional frequency spectrums are sub-divided into 6 MHz channels (Figure 3C, column 9, lines 65-67). Data are then encoded and transmitted within the divided channels (Figure 7, column 12, lines 25-46).

It is respectfully submitted that one of ordinary skill in the art would have had no motivation to selectively combine portions of the Lazzuri system with portions of the Hawkins system to arrive at the apparatus recited in claim 20. Specifically, there is no motivation to combine Lazzuri's satellite based system for the SEGA channel, which uses an uplink and downlink signals which are uni-directional with the bi-directional trunk system utilizing a digital bi-directional segmented cable frequency spectrum as discussed in Hawkins. The compatibility between the systems of Lazzuri and Hawkins is unclear and the Office Action merely asserts the

alleged obviousness of the combination. In fact, the combination of Lazzuri and Hawkins fails to suggest the features of claim 20. For all these reasons, it is respectfully submitted that the combination is improper and that claim 20 is patentable over the applied references.

On page 7 of the Office Action, claim 1 is rejected under 35 U.S.C. §103(a) over Reed, in view of Okamoto, and in further view of U.S. Patent No. 6,320,868 to Okano et al. (hereinafter "Okano"). The rejection is respectfully traversed.

Claim 1 calls for a multiplexer configured to convert image information, audio, information, a game program, and game related information into a transport stream. As discussed above for claim 2, Reed fails to disclose such a multiplexer. Instead, Reed's multiplexer 304 merely divides up a single game program and transmits each portion through a plurality of tone channels or transmits a plurality of game programs in separate tone channels. Okamoto and Okano fail to overcome the deficiencies in Reed. Therefore, claim 1 is patentable over the applied references. Withdrawal of the rejection is respectfully requested.

On page 8 of the Office Action, claim 5 is rejected under 35 U.S.C. §103(a) over Okamoto in view of Okano. The rejection is respectfully traversed.

Claim 5 calls for a tuning unit configured to receive image and audio information, a game program ordered by a user, and game related information, and configured to select either image or audio information corresponding to a channel desired by a user, or a game program ordered by the user.

Okamoto discloses a terminal modem 3 connected to the transmission paths 200 which includes a modulator/demodulator 3a and a video tuner 3b which selects a channel of the image to be projected (column 4, lines 64-67). Okamoto discloses a video tuner 3b with the ability to select between channels or an image to be projected, but fails to disclose the ability to select between image and audio information or a game program ordered by the user, as called for in claim 5. Further, it appears Okamoto cannot select between an image and audio information or a game program because, as discussed above for claim 16, Okamoto has only the ability to transmit a game data, karaoke data, or other data one at a time (column 4, lines 39-56, column 6, lines 23-31). Okano fails to overcome the above-discussed deficiencies in Okamoto. Consequently, claim 5 is patentable over the applied references. Withdrawal of the rejection is respectfully requested.

On page 9 of the Office Action, claims 6-8 are rejected under 35 U.S.C. §103(a) over Okamoto in view of Okano, in further view of Lazzuri. The rejection is respectfully traversed.

As discussed above for claim 5, the combination of Okamoto and Okano fails to render obvious the features of claim 5, from which claims 6-8 depend. As Lazzuri fails to suggest the features lacking in Okamoto, Okano, or their combination, claims 6-8 are patentable over the applied references for at least the reasons discussed above and for the additional features they recite. Withdrawal of the rejection is respectfully requested.

On page 10 of the Office Action, claims 9-13 are rejected under 35 U.S.C. §103(a) over U.S. Patent No. 6,513,160 to Dureau, in view of Okano, and further in view of Lazzuri. The rejection is respectfully traversed.

Claim 9 calls for a processor configured to receive an input from a user interface, and to output either a first control signal to select a broadcast signal of a channel desired by a user, or a second control signal to order a game desired by the user.

Dureau discloses a set top box 20 which maybe a processing unit for receiving and processing a transmitted signal and conveying the processed signal to a television or other monitor (column 4, lines 18-22). The set top box 20 is disclosed to serve to modulate the signal containing both an application and a television program received from broadcast station 12 and to separate the application from the television program. The set top box also executes the application and combines the audio and video portions of the television program with video and/or audio generated by the application as required by the application (column 4, lines 27-33).

A return path through a modem within the set top box connected to a standard telephone line may be used to provide data to the broadcast service provider (column 4, lines 37-43). Therefore, Dureau discloses some interaction between the set top box 20 and a broadcast station 12. However, Dureau fails to disclose a processor that is able to output a second control signal to order a game desired by the user. That is, there is no game ordering disclosed in Dureau. The genie character referred to in the Office Action is a pre-existing program or a pre-

embedded interactive application. Portions of the genie program is pre-stored in the set top box 20 (column 7, lines 58-61) while other genie related applications are automatically sent embedded in the broadcast signal (col. 5, lines 54-57). The genie is not a game ordered by a user upon an output of a second control signal.

Okano and Lazzuri fail to disclose such a processor and fail to overcome the deficiencies in Dureau. Consequently, claim 9 is patentable over the applied references. Claims 10-13, which depend from claim 9, are likewise patentable over the applied references for at least the reasons discussed above and for the additional features there recited. Withdrawal of the rejection is respectfully requested.

Specifically, Applicant also note that claims 1, 9 and 20 specifically recite broadcast signals and clearly separates the game related information from the broadcast signal. Therefore, in view of the disclosure in the specification and claims, it is clear to one of ordinary skill in the art that in view of the specification, the image and audio information are not related to the game program but instead is related to the broadcast channel or a signal.

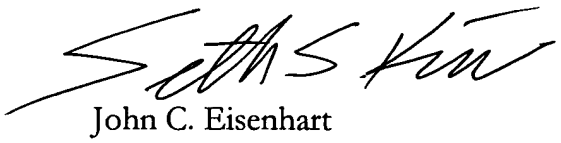
CONCLUSION

In view of the foregoing amendments and remarks, it is respectfully submitted that the application is in condition for allowance. If the Examiner believes that any additional changes would place the application in better condition for allowance, the Examiner is invited to contact

the undersigned attorney, **Seth S. Kim**, at the telephone number listed below. Favorable consideration and prompt allowance are earnestly solicited.

Please charge any shortage in fees due in connection with the filing of this, concurrent and future replies, including extension of time fees, to Deposit Account 16-0607 and please credit any excess fees to such deposit account.

Respectfully submitted,
FLESHNER & KIM, LLP



John C. Eisenhart
Registration No. 38,128
Seth S. Kim
Registration No. 54,577

P.O. Box 221200
Chantilly, Virginia 20153-1200
703 766-3701 DYK/JCE/SSK:knv
Date: NOVEMBER 23, 2004

Please direct all correspondence to Customer Number 34610

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